FIG.1

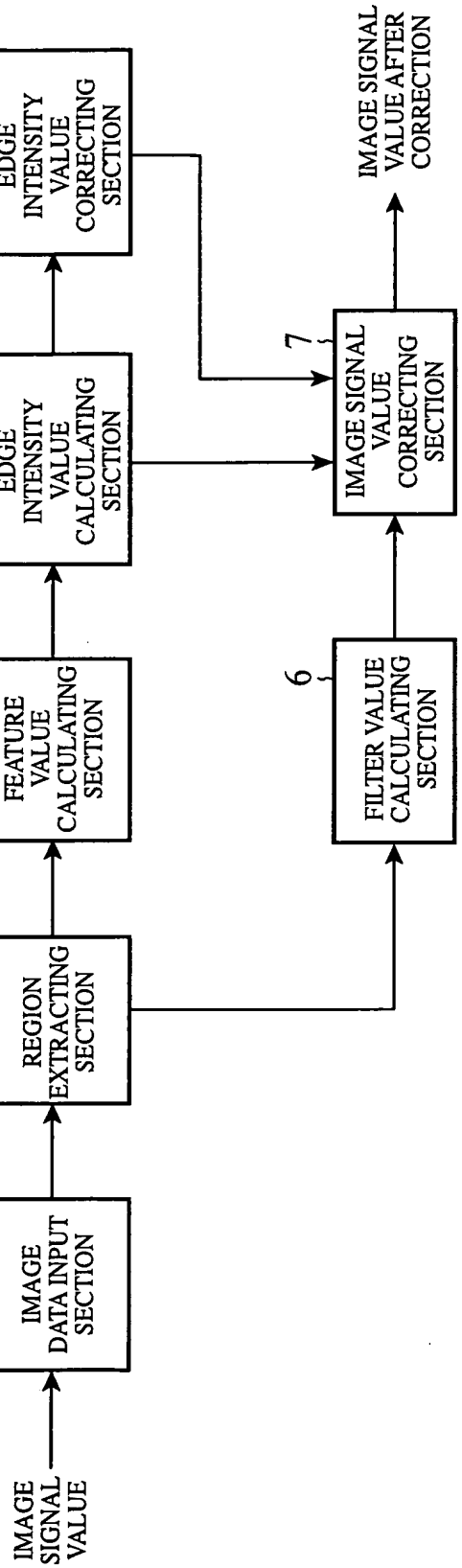
IMAGE SIGNAL VALUE
1
IMAGE DATA INPUT SECTION
2
REGION EXTRACTING SECTION
3
FEATURE VALUE CALCULATING SECTION
4
EDGE INTENSITY VALUE CALCULATING SECTION
5
EDGE INTENSITY VALUE CORRECTING SECTION
6
FILTER VALUE CALCULATING SECTION
7
IMAGE SIGNAL VALUE CORRECTING SECTION
IMAGE SIGNAL VALUE AFTER CORRECTION

FIG.2

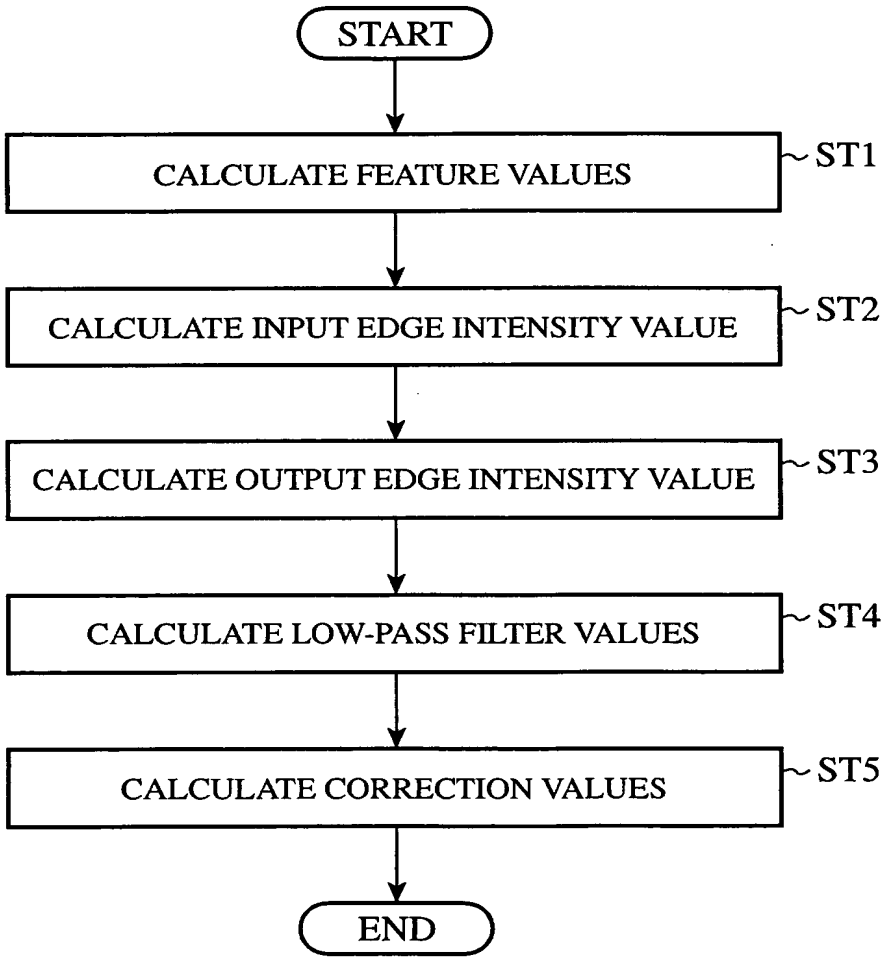
START
CALCULATE FEATURE VALUES
ST1
CALCULATE INPUT EDGE INTENSITY VALUE
ST2
CALCULATE OUTPUT EDGE INTENSITY VALUE
ST3
CALCULATE LOW-PASS FILTER VALUES
ST4
CALCULATE CORRECTION VALUES
ST5
END

FIG.3

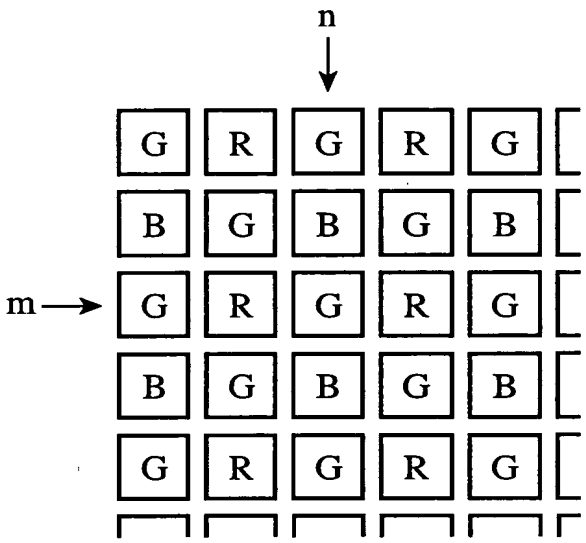

FIG.4

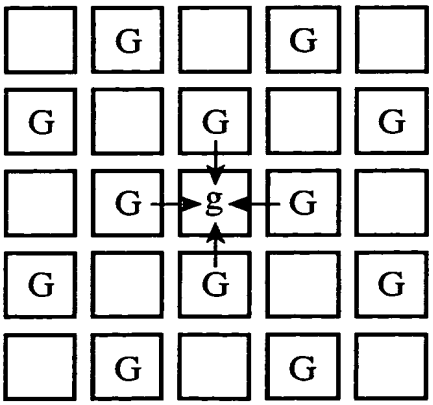

FIG.5

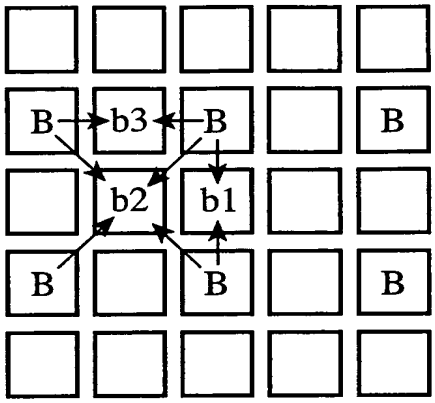

FIG.6

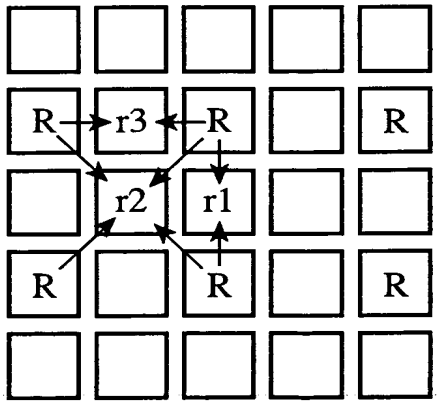

FIG.7

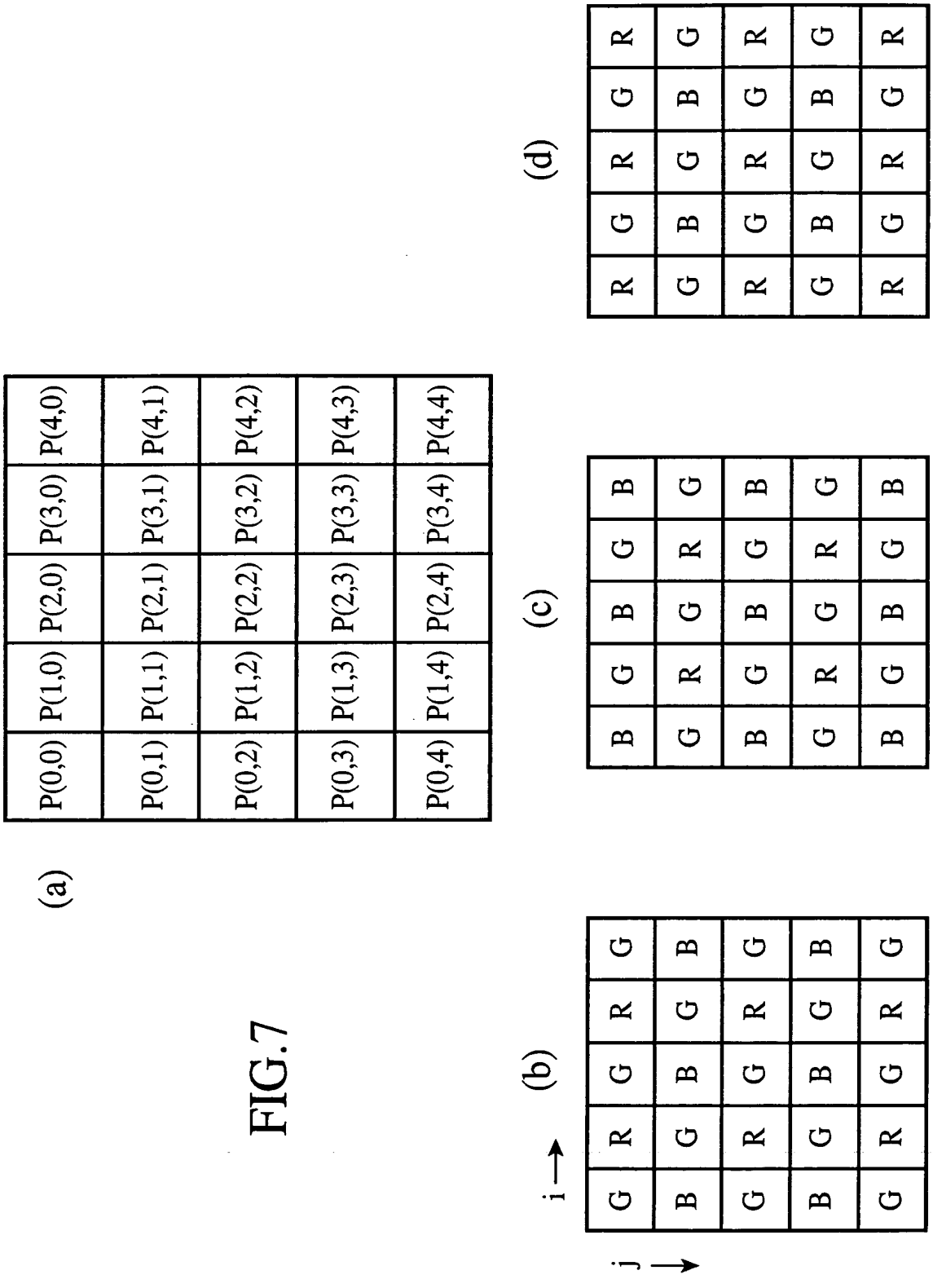
(a)
P(0,0) P(1,0) P(2,0) P(3,0) P(4,0)
P(0,1) P(1,1) P(2,1) P(3,1) P(4,1)
P(0,2) P(1,2) P(2,2) P(3,2) P(4,2)
P(0,3) P(1,3) P(2,3) P(3,3) P(4,3)
P(0,4) P(1,4) P(2,4) P(3,4) P(4,4)
(b)
i
j
G R G R G
B G B G B
G R G R G
B G B G B
G R G R G
(c)
B G B G B
G R G R G
B G B G B
G R G R G
B G B G B
(d)
R G R G R
G B G B G
R G R G R
G B G B G
R G R G R

FIG.8

D(0,0)	D(1,0)	D(2,0)	D(3,0)
D(0,1)	D(1,1)	D(2,1)	D(3,1)
D(0,2)	D(1,2)	D(2,2)	D(3,2)
D(0,3)	D(1,3)	D(2,3)	D(3,3)

FIG.9

-1	-1	-1	-1
-1	3	3	-1
-1	3	3	-1
-1	-1	-1	-1

FIG.10

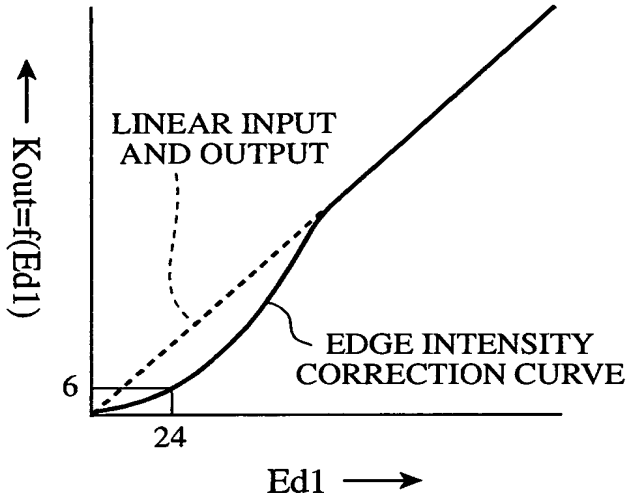

FIG.11

0	0	0	0
0	2	2	0
0	2	2	0
0	0	0	0

FIG.12

(a)

0	0	0	0	0
0	0	0	0	0
0	0	2	0	0
0	0	0	0	0
0	0	0	0	0

(b)

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

(c)

0	0	0	0	0
0	0	0	0	0
0	0	2	0	0
0	0	0	0	0
0	0	0	0	0

(d)

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

(e)

0	0	0	0	0
0	0	0	0	0
0	0	1	0	0
0	0	0	0	0
0	0	0	0	0

(f)

128	128	128	128	128
128	128	128	128	128
128	128	127	128	128
128	128	128	128	128
128	128	128	128	128

(g)

128	128	128	128	128
128	128	128	128	128
128	128	127	128	128
128	128	128	128	128
128	128	128	128	128

FIG.13

(a)

G	R	G	R	G
B	G	B	G	B
G	R	G	R	G
B	G	B	G	B
G	R	G	R	G

(b)

0	0	0	0	0
0	0	0	0	0
0	0	8	0	0
0	0	0	0	0
0	0	0	0	0

NOISE

(c)

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

(d)

0	0	0	0	0
0	0	2	0	0
0	2	8	2	0
0	0	2	0	0
0	0	0	0	0

(e)

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

(f)

0	0	0	0	0
0	0	1	0	0
0	1	5	1	0
0	0	1	0	0
0	0	0	0	0

(g)

128	128	128	128	128
128	128	127	128	128
128	127	125	127	128
128	128	127	128	128
128	128	128	128	128

(h)

128	128	128	128	128
128	128	127	128	128
128	127	125	127	128
128	128	127	128	128
128	128	128	128	128

FIG.14

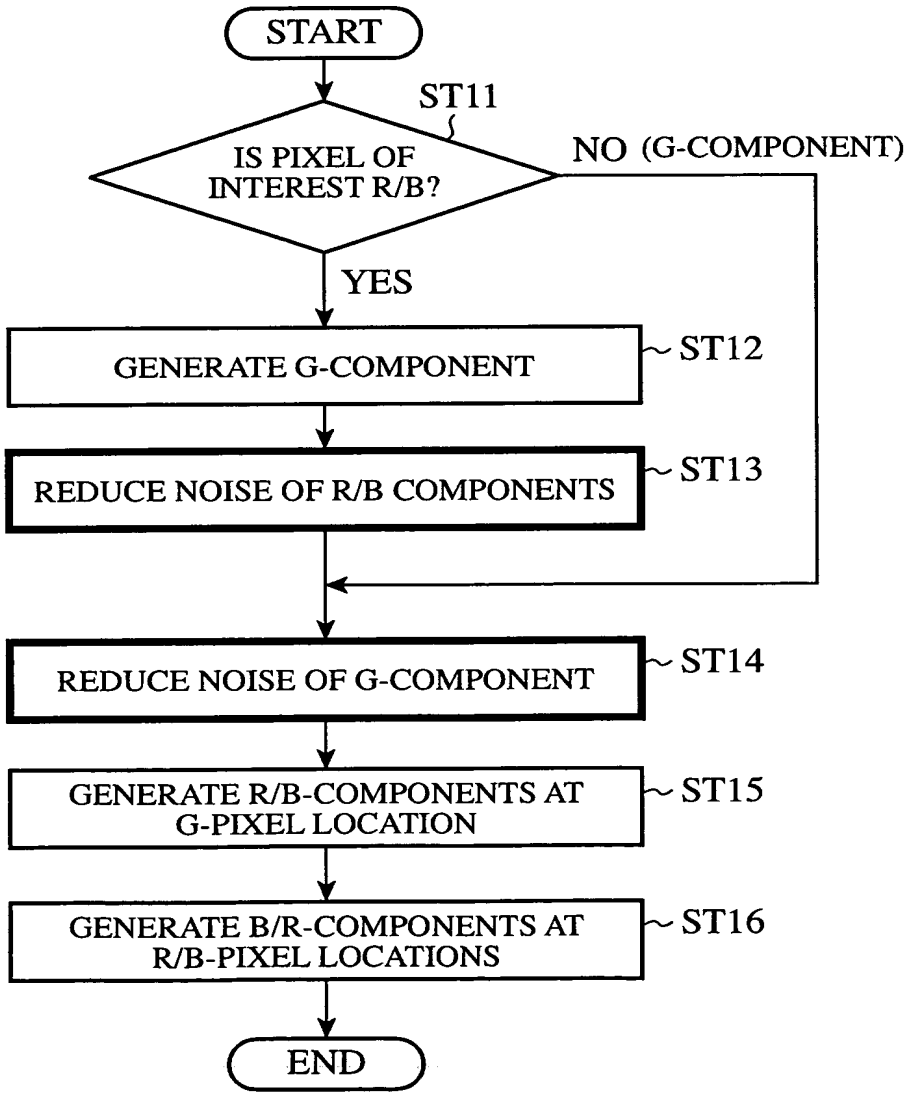
START
ST11
IS PIXEL OF INTEREST R/B?
NO (G-COMPONENT)
YES
GENERATE G-COMPONENT
ST12
REDUCE NOISE OF R/B COMPONENTS
ST13
REDUCE NOISE OF G-COMPONENT
ST14
GENERATE R/B-COMPONENTS AT G-PIXEL LOCATION
ST15
GENERATE B/R-COMPONENTS AT R/B-PIXEL LOCATIONS
ST16
END

FIG.15

	P(1,0)		P(3,0)	
P(0,1)		P(2,1)		P(4,1)
	P(1,2)	Pg(2,2)	P(3,2)	
P(0,3)		P(2,3)		P(4,3)
	P(1,4)		P(3,4)	

FIG.16

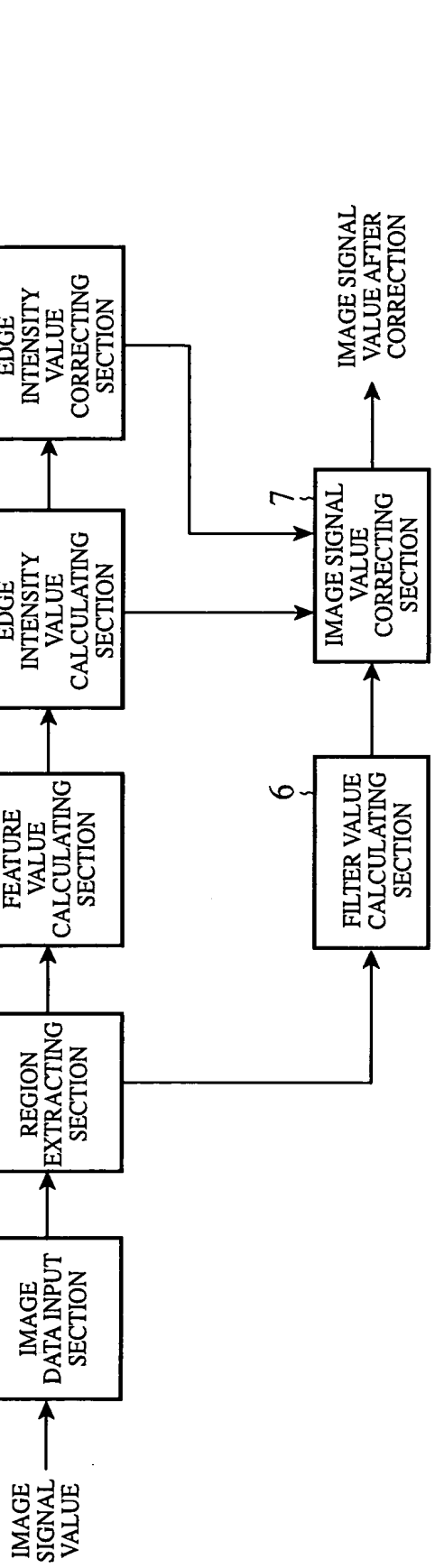
IMAGE SIGNAL VALUE
1
IMAGE DATA INPUT SECTION
2
REGION EXTRACTING SECTION
3
FEATURE VALUE CALCULATING SECTION
4
EDGE INTENSITY VALUE CALCULATING SECTION
5
EDGE INTENSITY VALUE CORRECTING SECTION
6
FILTER VALUE CALCULATING SECTION
7
IMAGE SIGNAL VALUE CORRECTING SECTION
IMAGE SIGNAL VALUE AFTER CORRECTION
11
BINARIZATION SECTION
12
CONTOUR DETECTING SECTION
13
IMAGE SIGNAL VALUE CORRECTING SECTION
IMAGE SIGNAL VALUE AFTER CORRECTION

FIG.17

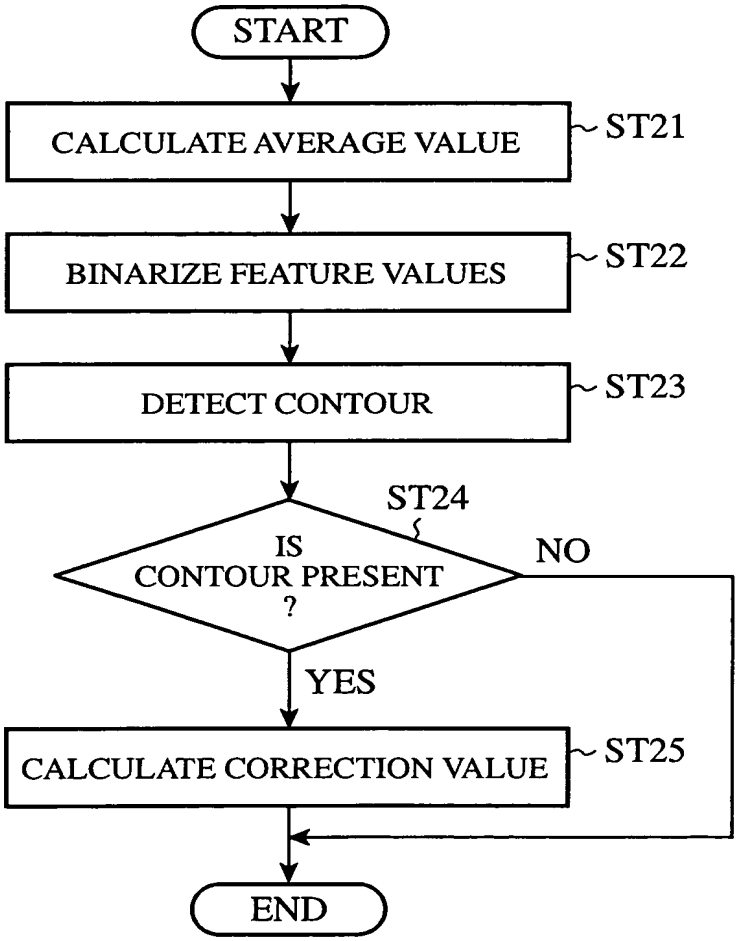
START
CALCULATE AVERAGE VALUE
ST21
BINARIZE FEATURE VALUES
ST22
DETECT CONTOUR
ST23
ST24
IS CONTOUR PRESENT ?
NO
YES
CALCULATE CORRECTION VALUE
ST25
END

FIG.18

0	0	1	1
0	0	1	1
0	0	1	1
0	0	1	1

0	0	1	1
0	1	1	0
1	1	0	0
1	0	0	0

1	0	0	0
0	1	0	0
0	0	1	0
0	0	0	1

0	0	0	0
0	0	0	0
1	1	1	1
1	1	1	1

FIG.19

(a)

P(0,0)	P(1,0)	P(2,0)	P(3,0)	P(4,0)
P(0,1)	P(1,1)	P(2,1)	P(3,1)	P(4,1)
P(0,2)	P(1,2)	P(2,2)	P(3,2)	P(4,2)
P(0,3)	P(1,3)	P(2,3)	P(3,3)	P(4,3)
P(0,4)	P(1,4)	P(2,4)	P(3,4)	P(4,4)

(b)

NOISE

0	0	3	255	20
0	0	3	255	20
0	0	8	255	20
0	0	3	255	20
0	0	3	255	20

(c)

0	2	129	137
0	3	130	137
0	3	130	137
0	2	129	137

(d)

0	0	1	1
0	0	1	1
0	0	1	1
0	0	1	1

(e)

0	0	3	255	20
0	0	5	255	20
0	0	8	255	20
0	0	5	255	20
0	0	3	255	20

(f)

0	0	3	255	20
0	0	4	255	20
0	0	5	255	20
0	0	4	255	20
0	0	3	255	20